

55f, 831

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 December 2004 (09.12.2004)

PCT

(10) International Publication Number
WO 2004/105944 A1

(51) International Patent Classification⁷: **B01J 37/26**,
37/00, C08G 65/10, 65/26

(21) International Application Number:
PCT/US2004/016394

(22) International Filing Date: 21 May 2004 (21.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/472,901 22 May 2003 (22.05.2003) US

(71) Applicant (for all designated States except US): **DOW GLOBAL TECHNOLOGIES INC.** [US/US]; Washington Street, 1790 Building, Midland, MI 48674 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DHINGRA, Sandeep, S.** [US/US]; 301 N Scenic Circle, Midland, MI 48642 (US). **MABE, Karla, F.** [US/US]; 579 E. Dopp Road, Midland, MI 48640 (US). **WATSON, Keith, Jeffrey** [CA/US]; 2408 Morning Dawn Drive, Midland, MI 48642 (US).

(74) Agent: **COHN, Gary, C.**; Gary C. Cohn PLLC, 4010 Lake of Washington Blvd. NE, Suite 105, Kirkland, WA 98033 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NANO-SCALE DMC CATALYST PARTICLES

(57) Abstract: Nano-scale DMC catalyst complexes are highly active alkylene oxide polymerization catalysts. They show a greatly improved ability to catalyze the formation of EO-capping onto secondary hydroxyl-terminated polyethers. The catalysts can be prepared by precipitation in the dispersed aqueous phase of a water-in-oil emulsion.

WO 2004/105944 A1